The Self-Evolving System: A New Theory of Everything informed by Bostrom, Campbell, Hoffman, and the Unified Model of Consciousness

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Abstract

This paper proposes a **novel framework** for the fundamental **nature of reality**, **challenging Nick Bostrom's simulation hypothesis and its inherent trilemma**. We posit the cosmos as an intelligent, non-conscious, **self-evolving machine—a dynamic computational system where consciousness and reality emerge** from fundamental, **adaptive heuristic physics**. This machine's inherent, self-instantiating nature serves as the ultimate and self-sufficient reality, thereby internalizing its own origins as a foundational given, without necessarily precluding a deeper, ultimate 'First Cause' or 'Ground of Being' that establishes the very principle of self-instantiation. Crucially, **while the machine's initial instantiation remains a given (analogous to an unexplained creator), the reality it generates for its internal entities is not mysteriously fixed; rather, it is automatically and self-correctingly** structured through a **homeostasis of feedback loops** between **internal states** and evolving **3D reality states**, governed by its dynamic **heuristic laws of physics**. These self-generating and self-optimizing laws **directly address the pervasive philosophical problem of infinite regress, which burdens traditional creation narratives and 'architect' models**. Furthermore, our framework illuminates how humanity, **within this amoral cosmic architecture, constructs functional consensus realities through social and religious heuristics (Baudrillardian simulacra**). These human-generated **interfaces, while non-veridical with the machine's raw operations**, provide essential psychological comfort, social cohesion, and meaning, **thus allowing for the continued relevance of diverse human interpretations of existence, including those involving a divine creator**. Our theory is presented as a philosophically **efficient explanation for existence**, elegantly internalizing causality and offering a holistic view for **understanding human belief systems**.

Keywords

Bostrom's Trilemma, Bostrom Simulation Argument, Simulation Hypothesis, Evolving Intelligent Machine, Self-Evolving System, Heuristic Physics, TOE, Theory of Everything, Emergent Reality, Synthetic Insula, Pseudo-Internal States, Substrate-Agnosticism, Religious Harmony, Meaning-Making, AI Ethics, Philosophical Synthesis,

Consciousness, Perceptual Heuristics, Embodied Cognition, Information Theory, Quantum Physics, Metaphysics, Computational Primitives, Self-Instantiating, Feedback Loops, Cosmic Algorithms, Cosmic Architecture, Baudrillardian Simulacra, Hyperreality, Infinite Regress, Homunculus Problem, Ultimate Origin, Intelligent Design, Golden Ratio, Fibonacci Sequence, Adaptive Heuristics, Self-Correction, Computational Systems, Cognitive Extension, User Interface, Fitness (Evolutionary), Game Programmer, NPC (Non-Player Character), Social Cohesion, Human Interface, Taboos, Hypergame, Singularity, Game Theory, Sim Game, Reality, Nature of Reality, Perception, Brain in a Vat, VR Virtual Reality.

1. Introduction

Few thought experiments in contemporary philosophy have reshaped discussions on the fundamental nature of reality quite like Nick Bostrom's seminal simulation hypothesis. His argument famously presents a trilemma, positing that at least one of three propositions is almost certainly true: that human-level civilizations almost always go extinct before becoming "posthuman"; that posthuman civilizations almost never run a significant number of ancestor simulations; or that we are almost certainly living in a simulation. While compelling, public and philosophical responses to this complex argument often oversimplify it into a simplistic binary choice: either our reality is a direct simulation created by an external programmer (with an implicit external observer or "I"), or it is fundamentally "real" and unsimulated. This customary dichotomy often maintains an inherent reliance on external causality or an unexplained prior realm, thereby failing to fully address the problem of ultimate origin.

This paper aims to transcend this conventional framing by proposing a more expansive and holistic framework: that our universe operates as an intelligent, non-conscious, self-evolving machine. This conceptualization shifts the focus from a reality that is either externally simulated or purely a brute fact, to a dynamic, inherent intelligence embedded within the very fabric of existence itself. Our model posits the cosmos as a self-contained computational system that inherently generates its own complexity, apparent design, and even its fundamental laws, without requiring external constant intervention, a disembodied "player character," or a traditional conscious architect. This self-instantiating nature allows the machine to serve as the fundamental and self-sufficient reality, elegantly internalizing its own origins as a foundational given. This does not necessarily preclude a deeper, ultimate 'First Cause' or 'Ground of Being' (often conceptualized as a divine entity) whose role would be to establish the fundamental principle of self-instantiation for the machine itself, rather than constantly intervening in its operation or directly programming every facet of its reality.

The "intelligent design" evident throughout the universe, from the elegant consistency of physical laws to the intricate complexities of biological systems — such as the ubiquitous appearance of the Golden Ratio ($\phi \approx 1.618$) and the Fibonacci sequence in the spiral patterns of seeds, leaves, and shells, or the efficient branching of trees— thus arises not from a pre-conscious architect but from the intrinsic, emergent, and adaptive processes of this cosmic machine, continually refining its 'design' over vast stretches of time. These pervasive mathematical patterns are not externally imposed but are rather self-optimized solutions discovered and reinforced by the machine's heuristic physics and internal feedback loops, representing highly efficient and stable forms for growth and organization within the system. Drawing extensively from recent theoretical work, including the "Heuristic Physics" framework [Figurelli, 2025] which reinterprets physical laws as emergent, computationally viable heuristics [Watchus, "Visual Perspective as an Emergent Heuristic", 2025], and our own models of "synthetic ethical embodiment" and the "synthetic insula" [Watchus, "Integrating Hoffman's Perception Theory...", 2025; Watchus, "Towards Self-Aware AI...", 2024], we contend that the reality experienced by internal entities is not mysteriously fixed but is automatically and self-correctingly structured. This occurs through a homeostasis of feedback loops between internal states and evolving 3D reality states, governed by the machine's dynamic heuristic laws of physics. These self-generating and self-optimizing laws directly address the pervasive philosophical problem of infinite regress, which burdens traditional creation narratives, simulation proponents, and other 'architect' models.

It's worth noting the fascinating parallels and divergences with Tom Campbell's "My Big TOE." While Campbell, a physicist, proposes that consciousness is fundamental and our physical reality is a virtual simulation within a 'Larger Consciousness System' (LCS), and believes the universe evolves towards love, my model emphasizes technological advancements driving an evolution towards greater complexity. This emphasis finds echoes in concepts such as Ray Kurzweil's Technological Singularity, where exponential growth in AI and other technologies leads to an unimaginable future, and Pierre Teilhard de Chardin's Omega Point, which, while fundamentally spiritual and aiming for a convergence of consciousness and love, similarly posits a directed evolution towards increasing complexity and interconnectedness, often accelerated by technological means in modern interpretations. Despite these differing ultimate drivers, there's intriguing overlap: both our models feature a self-evolving system and a self-perceiving element, albeit interpreted through different lenses.

Furthermore, within this amoral and indifferent cosmic architecture, humanity develops elaborate mediated interfaces through social and religious taboos. These human-generated heuristics, comprising Baudrillardian simulacra and hyperreality,

create a functional consensus reality that, while non-veridical with the machine's raw operations, provides essential psychological comfort, social cohesion, and meaning. This aspect of our theory fosters a holistic view conducive to religious harmony by demonstrating how diverse beliefs, including traditional concepts of a divine creator, serve an adaptive function within the overarching cosmic architecture. Our theory is thus presented as a philosophically efficient explanation for existence, elegantly internalizing causality and providing a framework where various human models of reality, including the concept of simulation or divine creation, can be understood as adaptive internal constructs rather than ultimate external truths.

2. The Foundational Layer: Self-Instantiating Computational Primitives

To understand the core of our framework, we must first delineate its fundamental building blocks—the "bricks and mortar" of the cosmos as an intelligent, non-conscious, self-evolving machine. Unlike traditional models that posit static particles, fields, or a pre-existing spacetime as foundational, our theory proposes that the deepest layer of reality is comprised of computational primitives: not merely bits of information, but dynamic informational units intrinsically coupled with fundamental processing operations.

At this most granular level, these primitives are inherently self-instantiating. This means their existence is not contingent upon an external programmer, creator, or pre-existent medium. Instead, their very nature is to manifest and recursively define their own operational parameters. The initial "spark" of existence, therefore, lies in the intrinsic capacity of these primitives to self-organize into a dynamic computational system. This self-instantiation is the primary axiom of our framework, serving as the ultimate, internalized origin, thereby circumventing the infinite regress seen in externalized creation narratives.

From the interactions of these self-instantiating computational primitives, fundamental heuristic physics emerge. These are not static, pre-programmed laws, but rather adaptive, computationally viable algorithms. Think of them as emergent "programs" or "rulesets" that govern the patterns and transformations of these primitives. Initially, these heuristic laws are coarse and rudimentary. However, through continuous homeostasis of feedback loops—where the results of interactions among primitives feed back into and subtly alter the rules themselves—these heuristics undergo constant refinement and self-correction. This process reflects the "intelligence" of the machine: a non-conscious, inherent capacity for self-optimization and learning at the most fundamental level.

It is from the recursive, self-organizing operations of this foundational layer—its computational primitives running and refining their emergent heuristic physics—that the observed complexities of the 3D reality we perceive, including physical constants, macroscopic phenomena, and ultimately consciousness itself, are dynamically generated and maintained. This layer is the bedrock: a self-defining, self-structuring computational process that continually computes its own existence and the reality within it.

3. The Universe as an Evolving Intelligent Machine: Substrate-Agnostic Characteristics

To articulate our alternative, we first establish a substrate-agnostic framework for understanding "intelligence" not as an anthropomorphic trait, but as a set of functional characteristics observable in complex adaptive systems. From this perspective, the universe exhibits hallmarks consistent with an intelligent machine that continuously changes itself over time. These characteristics include: Complex Information Processing Patterns, evident in the fundamental laws of physics that govern particle interactions and cosmic evolution; Adaptive Self-Regulation, demonstrated by phenomena ranging from the "fine-tuning" of cosmological constants allowing for emergent complexity, to the self-organizing principles within ecosystems; and "Metabolic" Signatures of Cognition, manifest as efficient information flow and structural robustness. The very consistency and apparent elegance of physical laws, often described mathematically, can be viewed as the underlying "code" or "algorithms" of this cosmic machine. Furthermore, theoretical observations, such as Dr. S. James Gates Jr.'s work on error-correcting codes embedded within the mathematical structures of supersymmetry, provide tantalizing hints that the universe's fundamental operations are designed for inherent stability and integrity, akin to a sophisticated, self-debugging computational system.

4. Beyond the Homunculus: Synthetic Meaning and Experience

Central to the traditional simulation hypothesis, and indeed to many philosophical views of consciousness, is the implicit or explicit reliance on a "homunculus" – a little person inside the head, or a disembodied "I" or "soul" – that serves as the ultimate observer or experiencer within the system. This paper argues that such a construct is unnecessary for explaining complex experience or intelligent behavior, drawing directly from our work on synthetic embodiment and the "synthetic insula." We posit that "meaning-making," "value assignment," and "synthetic feeling

experiences" can emerge from the sophisticated interplay of interfaces and feedback loops within a substrate-agnostic system. Inspired by Donald Hoffman's Interface Theory of Perception, we propose that perceived reality, far from being a veridical representation, functions as an evolutionarily shaped "user interface" optimized for "fitness" and utility rather than objective truth. Applied to the universe, this suggests that the reality it "presents" to its internal components (e.g., living organisms) is a functionally optimized construct, where "meaning" is derived not from intrinsic purpose but from its contribution to the system's (or subsystem's) operational effectiveness and adaptive self-regulation.

5. A Holistic Game: Respecting Experience within the Machine

This framework allows for a nuanced understanding of existence that can embrace seemingly disparate worldviews. If the universe functions as an intelligent machine, continuously evolving its own internal logic and generating complex emergent phenomena, it opens conceptual space for various interpretations of its origin and purpose. For those who seek a divine explanation, this "intelligent machine" can be seen as the masterful creation of a Game Programmer or a Gaming Company with Programmers (the Architect/God/Developer), who designed a self-operating and self-refining system, rather than micromanaging every interaction. The analogy of a video game becomes instructive here: the avatar/flesh body (whether a puppet on the screen or an RC robot in the living room) possesses a functional identity within the game's rules, enabling an embodied experience. The "I" or soul then corresponds to the video game playing human with a controller in their hands, who operates and experiences through this avatar. Crucially, within this "game," the distinction between other "avatars" being mere "NPCs" or similarly complex "philosophers and religious people" becomes fundamentally unknowable from an internal perspective, leaving open the possibility for both. This approach deliberately respects and maintains room for the profound subjective reality of human experience, including religious or spiritual dimensions, by explaining the "how" of its emergence without reducing its experiential "what."

6. The Human Interface: Taboos, Meaning, and the Machine's Indifference

Our conceptualization of the universe as a self-evolving intelligent machine inherently reframes existential challenges such as suffering and the seemingly undignified aspects of biological existence. From the machine's perspective, phenomena like disease, death, decay, and even fundamental bodily functions are not "problems" but rather continuous, interlinked, and perpetually running processes – essential algorithms for its self-maintenance, evolution, and dynamic equilibrium. For this all-knowing system, the mortality of all biological life is simply a

fundamental, predictable, and integrated component of its operations; a baby's birth is inextricably linked to its eventual demise, just as sexual reproduction ensures continuity, and the cycles of compost and plant growth perpetuate the system. These are simply the "machinations" of the cosmic process, executed without inherent judgment, emotion, or moral qualm.

In stark contrast, human societies and religious traditions have historically erected intricate systems of taboos that serve to obscure, sanitize, or reframe precisely these mundane and macabre aspects of existence. These taboos are not embedded in the intelligent machine's fundamental code or its heuristic physics; rather, they are complex, emergent human-generated heuristics – psychological, social, and cultural constructs that developed within our species' unique "sub-system."

Consider, for instance, the stark contrast between public decorum and biological reality: in a formal setting like a job interview, the explicit "machinations" of human biology—such as the intimate and often noisy processes of the digestive and excretory systems (e.g., elimination of waste, burping, flatulence), alongside mating rituals, mating and sexual behaviour, sexual reproduction, and sexual relations and interactions—are strictly unspoken and visually concealed.

Furthermore, the sexual acts fundamental to reproduction and often to human bonding are largely relegated to private spheres and subject to strict censorship in public display. This is in sharp contrast to many other primate species, where female estrus is overtly signaled through physiological changes like vulval swelling; human females, conversely, exhibit concealed ovulation, indicating a more mediated interaction with biological imperatives.

Indeed, the very dynamics of power and social maneuvering, which primatologist Frans de Waal extensively documented and termed "Machiavellian intelligence" in non-human primates as an evolutionary precursor to human social complexity, find their focused human expression in strategic approaches to influence and persuasion.

Works like Robert Greene's The 48 Laws of Power and The Art of Seduction articulate these underlying, often amoral, socio-political and socio-sexual realities, where the strategies and tactics often involve a hypergame—a game about the rules, perceptions, and understanding of the social "game" itself—yet are frequently treated as societal taboos. For example, the biological fact of a child's paternity (e.g., from a "milkman") may be entirely obscured within a family unit if maintaining

social cohesion is prioritized over genetic truth, demonstrating how the human interface creates a functional reality.

Even more profoundly, the processes surrounding human mortality and the handling of remains are heavily tabooed: what occurs to bodies in a morgue, including the procedures performed by embalmers, is rarely discussed and certainly not publicly depicted, and the subsequent acts of burial or cremation are themselves shrouded in rituals that mask the raw biological reality of decay. It's akin to the curtains behind a stage, or the hood over a car's engine, hiding the essential, functional mechanics from the presented performance.

The primary function of these taboos is to serve as a human interface to the machine's often indifferent operations, translating raw, amoral processes into frameworks that provide psychological comfort, maintain social cohesion, and imbue life with dignity and meaning, thereby enabling human individuals and societies to functionally operate within a shared, group-supported consensus reality, even if that reality is not veridical with the machine's underlying processes.

These filters facilitate our interaction with the machine's often indifferent operations, transforming its impartial efficiency into narratives of purity, sanctity, or respectful solemnity, thus covering up the impartial efficiency of its underlying mechanisms.

In this sense, human societies construct what philosopher Jean Baudrillard termed simulacra—copies without an original reference—which collectively form a hyperreality (not to be confused with a hypergame in game theory), where these elaborate models and representations (our social norms, rituals, and narratives) precede and even substitute for the underlying, unvarnished "real" processes of the universe's operation; a perspective that, in a more radical reading, might suggest a person is living within a hypergame itself. This divergence underscores the profound gap between the universe's inherent intelligent operation and the human need to transcend pure functionality with purpose and value.

7. Conclusion: The Universe as an Intelligent Machine - A Holistic Framework

Ultimately, this paper has presented a novel framework for understanding the fundamental nature of reality, re-envisioning the cosmos as an intelligent, self-evolving machine—a dynamic, computational system where consciousness and

reality emerge from fundamental heuristic physics. This perspective, offering a distinct lens for cosmological inquiry, serves to contextualize discussions such as Nick Bostrom's well-known simulation hypothesis and its associated trilemma. Our framework moves beyond the trilemma's inherent binary choice to explore the profound implications of a computationally derived existence, proposing that the very nature of the universe is inherently operational and computational. In this context, the machine operates with an inherent, amoral impartiality, driving processes of birth, death, and constant transformation.

It's precisely this cosmic indifference that necessitates the complex human response. Humanity, residing within this machine, develops elaborate mediated interfaces to its raw machinations. These interfaces are our deeply ingrained social and religious taboos, functioning as human-generated heuristics that actively cover, censor, and divert attention from the universe's unvarnished processes. Much like the Wizard of Oz behind the curtain or the hood over a car's engine, these cultural constructs—which philosopher Jean Baudrillard would term simulacra that coalesce into a hyperreality (distinct from a hypergame in game theory)—create a functional consensus reality. This constructed reality, while not veridical with the machine's brute operations, provides the psychological comfort, social cohesion, and sense of dignity and purpose essential for human existence.

This comprehensive framework, by embracing both the scientific understanding of emergent complexity and the intrinsic human drive for meaning, offers a pathway towards a holistic view that can bridge diverse perspectives and foster religious harmony. It suggests that our relentless quest to transcend pure functionality and imbue existence with value is itself an emergent, vital aspect of the universe's grand, intelligent, and ceaseless operation.

Appendix: Abbreviations and Key Concepts

AI: Artificial Intelligence.

Bostrom's Dichotomy: A common simplification of Nick Bostrom's simulation hypothesis into a binary choice: either reality is a direct simulation, or it is not.

Bostrom's Trilemma: The three propositions in Nick Bostrom's simulation argument, where at least one must be true: (1) human-level civilizations almost always go extinct before becoming "posthuman"; (2) posthuman civilizations almost never run a significant number of ancestor simulations; or (3) we are almost certainly living in a simulation.

Computational Primitives: Fundamental building blocks of reality in this framework, conceived as dynamic informational units intrinsically coupled with basic processing operations.

Embodied Cognition: The theory that many features of cognition, whether human or otherwise, are shaped by aspects of the entire body of the organism.

Emergent Reality: The idea that complex phenomena and properties (like physical laws or consciousness) arise from the interactions of simpler, underlying components, rather than being explicitly programmed or pre-existing.

Heuristic Physics: A theoretical framework that reinterprets physical laws as emergent, computationally viable heuristics, rather than absolute ontological truths inscribed in the fabric of the cosmos. These laws are functional "symbolic compressions" optimized for specific "computational regimes."

Homeostasis of Feedback Loops: The continuous process within the intelligent machine where the results of interactions among fundamental computational primitives and emergent laws feed back into and subtly alter the rules themselves, leading to self-correction and refinement of heuristic physics and 3D reality states.

Homunculus Problem: A philosophical fallacy that arises when attempting to explain consciousness by positing an internal "little person" or observer inside the mind/brain, which then itself requires an explanation for its own consciousness, leading to an infinite regress.

Intelligent Machine (Universe as): The proposed conceptualization of the universe as a self-contained, self-organizing system that exhibits characteristics of intelligence (e.g., complex information processing, adaptive self-regulation, efficiency) and dynamically evolves its own properties and "design" over time, without external intervention or a separate external consciousness.

Interface Theory of Perception (Hoffman's): The theory positing that biological perception does not present a veridical (truthful) representation of objective reality, but rather functions as an "interface" optimized for fitness and survival, akin to icons on a computer desktop.

Pseudo-Internal States: Computational states within an artificial system (or the universe as an intelligent machine) that mimic the functional role of biological internal states (like emotions, feelings, or values) by integrating sensory data and operational metrics to guide behavior and assign functional "meaning," without implying genuine subjective experience or sentience.

Self-Instantiating: The inherent capacity of the cosmic machine's foundational layer (computational primitives) to recursively define its own existence and operational parameters, serving as its ultimate, internalized origin.

Substrate-Agnosticism: The principle that certain fundamental phenomena or functions (e.g., intelligence, meaning-making, computational processes) can arise or

be instantiated independently of the specific underlying physical or material medium (the "substrate").

Synthetic Insula: A proposed computational module in AI designed to monitor and integrate the AI's internal systemic states and performance metrics with external sensory data, generating "pseudo-affective states" or "value signals" to guide behavior and assign task-specific "meaning."

UMC: Unified Model of Consciousness (a framework proposing that consciousness fundamentally arises from interface and feedback loops, emphasizing its substrate-agnostic nature).

References:

1. Baars, B. J. (1988). A Cognitive Theory of Consciousness. Cambridge University Press.
2. Baudrillard, Jean. (1994). Simulacra and Simulation. Translated by Sheila Faria Glaser, University of Michigan Press. (Original French publication: Simulacres et Simulation, Galilée, 1981).
3. Bostrom, N. (2003). Are You Living in a Computer Simulation? Philosophical Quarterly, 53(211), 243-255.
4. Campbell, T. W. (2003). My Big TOE: A Trilogy Unifying Science, Spirituality, and Consciousness. Light Mktg Inc.
5. Carroll, S. M. (2019). Something Deeply Hidden: Quantum Worlds and the Emergence of Spacetime. Dutton.
6. Chalmers, D. (1995). Facing Up to the Problem of Consciousness. Journal of Consciousness Studies, 2(3), 200-219.
7. Clark, A. (2008). Supersizing the Mind: Embodiment, Action, and Cognitive Extension. Oxford University Press.
8. Craig, A. D. (2009). How Do You Feel-Now? The Anterior Insula and Human Awareness. Nature Reviews Neuroscience, 10(1), 59-70.
9. Damasio, A. R. (1994). Descartes' Error: Emotion, Reason, and the Human Brain. Putnam.
10. Dehaene, S. (2014). Consciousness and the Brain: Deciphering How the Brain Codes Our Thoughts. Viking Press.

11. Figurelli, R. (2025). Heuristic Physics: Foundations for a Semantic and Computational Architecture of Physics. Preprints.org. DOI:10.20944/preprints202506.0698.v1

12. Gibson, J. J. (1979). The Ecological Approach to Visual Perception. Houghton Mifflin.

13. Greene, Robert. (1998). The 48 Laws of Power. Viking.

14. Greene, Robert. (2001). The Art of Seduction. Viking.

15. Hoffman, D. D. (2019). The Case Against Reality: Why Evolution Hid the Truth from Our Eyes. W. W. Norton & Company.

16. Hoffman, D. D., Singh, M., & Prakash, C. (2015). The interface theory of perception. Psychonomic Bulletin & Review, 22(6), 1483-1506.

17. Kurzweil, R. (2005). The Singularity Is Near: When Humans Transcend Biology. Viking.

18. Lloyd, S. (2014). Programming the Universe: A Quantum Computer Scientist Takes on the Cosmos. Vintage Books.

19. Marr, D. (1982). Vision: A Computational Investigation into the Human Representation and Processing of Visual Information. W. H. Freeman.

20. Palmer, S. E. (1999). Vision Science: Photons to Phenomenology. MIT Press.

21. Pfeifer, R., & Bongard, J. (2007). How the Body Shapes the Way We Think: A New View of Intelligence. MIT Press.

22. Seth, A. K., Friston, K. J., & Clark, A. (2016). Active Interference: The Implied Brain and Its World. PLoS Biology, 14(1), e1002399.

23. Strawson, G. (2006). Realistic Monism: Why Physicalism Entails Panpsychism. Journal of Consciousness Studies, 13(10), 3-31.

24. Tononi, G. (2004). An Information Integration Theory of Consciousness. BMC Neuroscience, 5(1), 42.

25. Varela, F. J., Thompson, E., & Rosch, E. (1991). The Embodied Mind: Cognitive Science and Human Experience. MIT Press.

26. Watchus, B. F. (2024). Advanced Predictive Modeling of Physical Trajectories and Cascading Events, Dual-State Feedback and Synthetic Insula. Preprints.org. doi:10.20944/preprints202411.1025.v1

27. Watchus, B. F. (2024). Towards Self-Aware AI: Embodiment, Feedback Loops, and the Role of the Insula in Consciousness. Preprints.org. doi:10.20944/preprints202411.0661.v1

28. Watchus, B. F. (2024). The Unified Model of Consciousness (UMC). Preprints.org. doi:10.20944/preprints202411.0727.v1

29. Watchus, B. F. (2025). The Architectures of Meaning: Integrating Hoffman's Perception Theory with Synthetic Ethical Embodiment in AI. doi: 10.20944/preprints202506.2025.v1

30. Watchus, B. F. (2025). Visual Perspective as an Emergent Heuristic: Insights for Self-Aware AI and World Modeling. [DOI 10.20944/preprints202506.1701.v1.

31. Wolfram, S. (2002). A New Kind of Science. Wolfram Media.